



# Understanding the ASTRONOMICAL UNIT (AU)

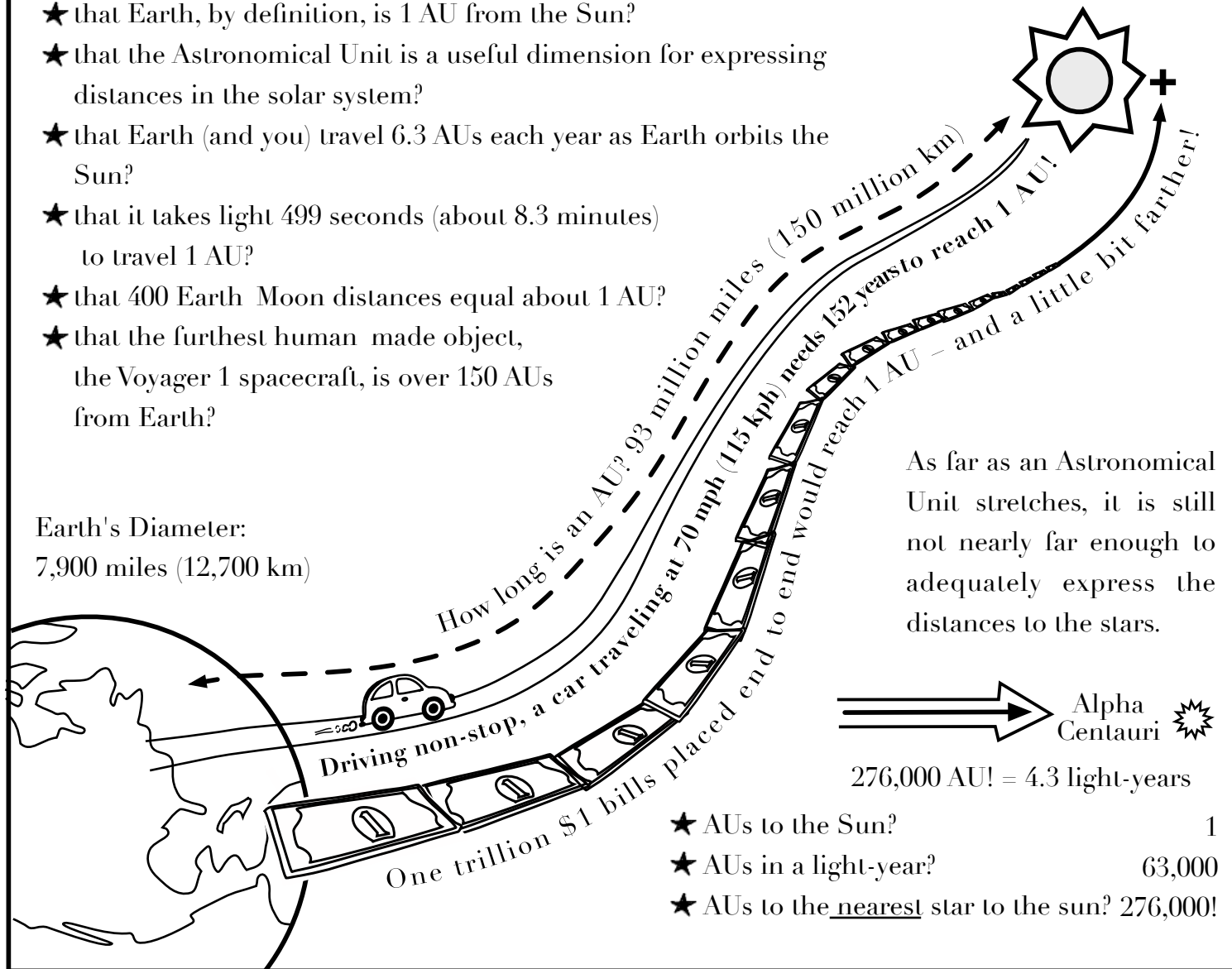
One Astronomical Unit equals Earth's average distance from the Sun:  
about 93 million miles (or 150 million kilometers)

## Did you know ...

- ★ that Earth, by definition, is 1 AU from the Sun?
- ★ that the Astronomical Unit is a useful dimension for expressing distances in the solar system?
- ★ that Earth (and you) travel 6.3 AUs each year as Earth orbits the Sun?
- ★ that it takes light 499 seconds (about 8.3 minutes) to travel 1 AU?
- ★ that 400 Earth-Moon distances equal about 1 AU?
- ★ that the furthest human-made object, the Voyager 1 spacecraft, is over 150 AUs from Earth?

Sun's Diameter:  
865,000 miles (1,400,000 km)

Earth's Diameter:  
7,900 miles (12,700 km)



As far as an Astronomical Unit stretches, it is still not nearly far enough to adequately express the distances to the stars.

- ★ AUs to the Sun? 1
- ★ AUs in a light-year? 63,000
- ★ AUs to the nearest star to the sun? 276,000!

## Relative orbital spacing of the major planets

